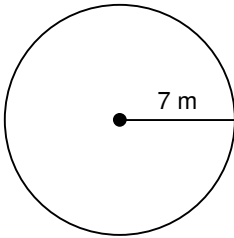


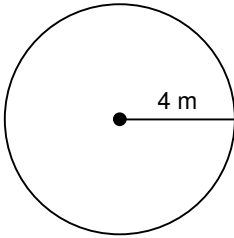
Circle Test Review**Multiple Choice**

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. Calculate the circumference of this circle.
Use $\pi = 3.14$ and round your answer to the nearest tenth.



- a. 22.0 m b. 87.9 m c. 153.9 m d. 44.0 m
- _____ 2. Find the diameter of a circle with a circumference of 14.3 mm.
Round your answer to the nearest tenth.
- a. 4.6 mm b. 2.3 mm c. 9.1 mm d. 7.2 mm
- _____ 3. What is the area of this circle?
Use $\pi = 3.14$ and give the answer to the nearest square unit.

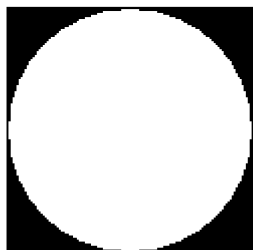


- a. 66 m² b. 33 m² c. 50 m² d. 25 m²
- _____ 4. Find the area of a circle that has diameter 28.9 cm. Round your answer to the nearest tenth.
- a. 164.0 cm² b. 2623.9 cm² c. 90.8 cm² d. 656.0 cm²
- _____ 5. The radius of a circle is 15 cm. What is the diameter?
- a. 30 cm c. 94 cm
b. 60 cm d. 188.5 m

Name: _____

ID: A

- ____ 6. The square below has a side length of 12 cm. What is the area of the shaded region?

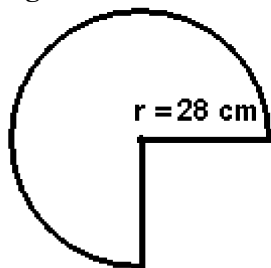


- a. 115.7 cm^2 c. 30.9 cm^2
b. 87.2 cm^2 d. 106.3 cm^2

Short Answer

7. What is the definition of the radius of a circle?
8. What is the definition of the diameter of a circle?
9. What is the relationship between the radius of a circle and the diameter of a circle?

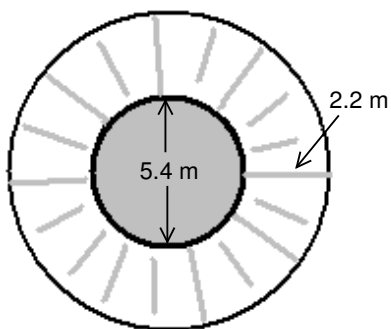
Figure 5.6



10. What is the perimeter of the shape in Figure 5.6? Round your answer to one decimal place.

Problem

11. This diagram shows the top view of a circular deck surrounding a circular hot tub. What is the area of the deck? Round your answer to the nearest tenth. Show your work.



Circle Test Review Answer Section

MULTIPLE CHOICE

- | | | | |
|-----------|------------------|------------------------------------|----------------------------------|
| 1. ANS: D | DIF: Moderate | REF: 6.2 Circumference of a Circle | |
| LOC: 8m35 | TOP: Measurement | | KEY: Knowledge and Understanding |
| 2. ANS: A | DIF: Moderate | REF: 6.2 Circumference of a Circle | |
| LOC: 8m35 | TOP: Measurement | | KEY: Knowledge and Understanding |
| 3. ANS: C | DIF: Moderate | REF: 6.3 Area of a Circle | |
| LOC: 8m36 | TOP: Measurement | | KEY: Knowledge and Understanding |
| 4. ANS: D | DIF: Moderate | REF: 6.3 Area of a Circle | |
| LOC: 8m36 | TOP: Measurement | | KEY: Knowledge and Understanding |
| 5. ANS: A | REF: UC, C | OBJ: 5.1 | |
| 6. ANS: C | REF: PS | OBJ: 5.6 | |

SHORT ANSWER

7. ANS:
The radius is the length of the line joining the centre of a circle to a point on the circle.
- REF: C OBJ: 5.1
8. ANS:
The diameter is the length of the line segment joining two points on a circle and passing through the centre of the circle.
- REF: C OBJ: 5.1
9. ANS:
The diameter is twice the length of the radius.
- REF: C OBJ: 5.1
10. ANS:

$$P = 28 + 28 + \frac{3}{4}(2\pi \times 28)$$

$$P \approx 56 + 131.9$$

$$P \approx 187.9 \text{ cm}$$
- REF: AM OBJ: 5.6

PROBLEM

11. ANS:

Methods may vary. Sample:

Area of circle: $A = \pi r^2$ Radius of hot tub = $\frac{5.4 \text{ m}}{2} = 2.7 \text{ m}$ Area covered by hot tub: $= \pi \times (2.7 \text{ m})^2$ Radius of circle around the deck = $2.7 \text{ m} + 2.2 \text{ m} = 4.9 \text{ m}$ Area of this circle: $= \pi \times (4.9 \text{ m})^2$ Area of deck = $\pi \times (4.9 \text{ m})^2 - \pi \times (2.7 \text{ m})^2$
 $\approx 52.5 \text{ m}^2$

DIF: Difficult

REF: 6.3 Area of a Circle

LOC: 8m36

TOP: Measurement

KEY: Communication